



YOSEMITE INDIANS

SPECIAL ISSUE

YOSEMITE NATURE NOTES

Cover illustration: Ta-bu-ce, for many years a familiar figure in Yosemite, shortly before her death in 1947 at a probable age of more than 90 years. This and other illustrations in this booklet are by Ralph Anderson, unless otherwise credited.

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Yosemite Nature Notes

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YOSEMITE INDIANS Yesterday and Today

By Elizabeth H. Godfrey

FOREWORD

After looking over the Indian exhibit in the museum many park visitors desire a publication on the history, habits, and livelihood of the original inhabitants of this area. With a hope of supplying such a requirement at a minimum cost, this special issue of Yosemite Nature Notes has been prepared. It is in part a compilation of historical information obtained from various articles that have appeared from time to time in Yosemite Nature Notes and other publications. Due credit must also be given James E. Cole, former Junior Park Naturalist, whose exhaustive notes on this subject were of considerable value. The help of M. E. Beatty, former Associate Park Naturalist, under whose supervision the original edition of this booklet was prepared should also be noted. The publication of this second edition was made possible through the assistance of former Park Naturalist C. Frank Brockman.

THE STORY OF CHIEF TENAYA

Centuries before the advent of the white man, Yosemite Valley is believed to have been inhabited by Indians. With the ravages of wars and black sickness the Ahwahneeches, a powerful tribe—and one of the last to occupy the "deep, grassy valley"—became practically annihilated. The few disheartened survivors left to affiliate with other neighboring tribes.

After many years of abandonment, a young and adventurous Indian by the name of Tenaya, who claimed

to be a direct descendant of the Chief of the Ahwahneeches, and who had been born and raised among the Monos, decided to return to what he considered his homeland. From the Monos, Piutes, and other tribes, he persuaded remnants of his father's people to join him, and with a band of approximately two hundred he reoccupied the valley, naming himself as chief. These Indians represented a small part of the Interior California Miwoks, which in ancient times numbered in the neighborhood of 9,000, and comprised a group of

closely related tribes occupying the western foothills and lower slopes of the Sierra Nevada.

In accordance with Indian tradition, Tenaya's tribesmen were separated into two divisions—the "Coyote" side and the "Grizzly Bear" side. Outsiders eventually designated the whole tribe as "Yosemites," which means "Grizzly Bear." The valley itself remained "Ahwahnee" to the Indians, as it had been so called by the earlier Ahwahneeche inhabitants.

For a few score years Tenaya reigned supreme in "Ahwahnee." Then in his declining years came the California gold rush. Wherever mining activities flourished, Indian supremacy quickly vanished. Driven

from his home, the red man sought another dwelling place, only to be routed out again and again with further aggression of the whites. His final destination was the Indian reservation.

Nearer and nearer came the greedy gold-seekers to Tenaya's domain. Such towns as Mariposa, Mt. Bullion, and Coulterville sprang up with suddenness when gold discoveries drew throngs of white men to their vicinities. While Indians of the foothills made treaties with the whites, many mountain Indians including the Yosemites resented their intrusion. In retaliation and in a futile effort to discourage the white men from further usurping their



Miniature Indian Village Diorama—Indian Room, Yosemite Museum

lands, a number of Indian outrages were committed, some of which were charged directly to the Yosemite Indians.

THE MARIPOSA BATTALION

In March, 1851, under the authority of Governor McDougal, the Mariposa Battalion was organized to subdue the Yosemite and their neighboring tribes, and to convey them to the Fresno River Reservation where Indians of the San Joaquin Valley and the coast had already been established by the Indian Commissioners.

James D. Savage, a trader, was elected major of the battalion. Savage had a personal grudge to settle. The previous December, his Fresno River store had been attacked by the Indians and destroyed. The two men in charge had been ruthlessly murdered. Simultaneously, his Mariposa Creek Station had been ravaged, and three white men killed. Being thoroughly convinced that the Yosemite were the ringleaders in these outrages, Savage vowed he would rout them out to the last Indian from their stronghold where they believed themselves secure, and would bring them to submission either by treaty or force of arms.

After the Mariposa Battalion had surprised and captured an Indian rancheria on the South Fork of the Merced River at what is now called Wawona, Savage sent an Indian messenger ahead to demand Tenaya to surrender, emphasizing that it would be to the advantage of the

Yosemites to immediately sign a treaty with the Indian Commissioners to quitclaim their lands, and to leave for the reservation on the Fresno River without resistance.



Francisco, an early day Yosemite in dance costume. (Boysen photo)

Upon Tenaya's advice, the Yosemite agreed to make treaty, and the old chief himself went on ahead to report to Savage that his people were coming in. Savage waited three days for the fulfillment of Tenaya's promise, and then suspecting him of deceit, took part of his company and set out toward the valley

with Tenaya acting as guide. Following along an old Indian trail in the approximate location of the present Wawona Road, they came midway upon a scattered line of seventy-two Indians. There were old squaws, younger women with pa-pooes on their backs, small children, but no braves. All were weary from the long march over and through snow several feet deep. Although Tenaya assured Savage that this group represented his entire tribe, Savage was still suspicious. He sent Tenaya back to the South Fork Camp with the Indians, while he and his soldiers went on in search for the rest of the Yosemitees.

YOSEMITE VALLEY ENTERED

Through Savage's grim determination to rout out the Yosemitees from their mountain refuge, Yosemite Valley was first entered by him and his small company of soldiers on March 21, 1851. *

Emerging from the forest, the detachment suddenly came out on a

clearing—old Inspiration Point. Revealed in panorama before their eyes was Tenaya's secret fortress—a gem of a valley, river-ribboned, in a setting of sheer, precipitous, granite cliffs, domes, and spires of surpassing grandeur. What they witnessed had been wrought by millions of years of geologic changes, but history bears record that only one of these rough mountaineers, Dr. L. H. Bunnell, was emotionally stirred by the awe-inspiring view. The thought uppermost was to blot out the Indians who claimed this valley as their own.

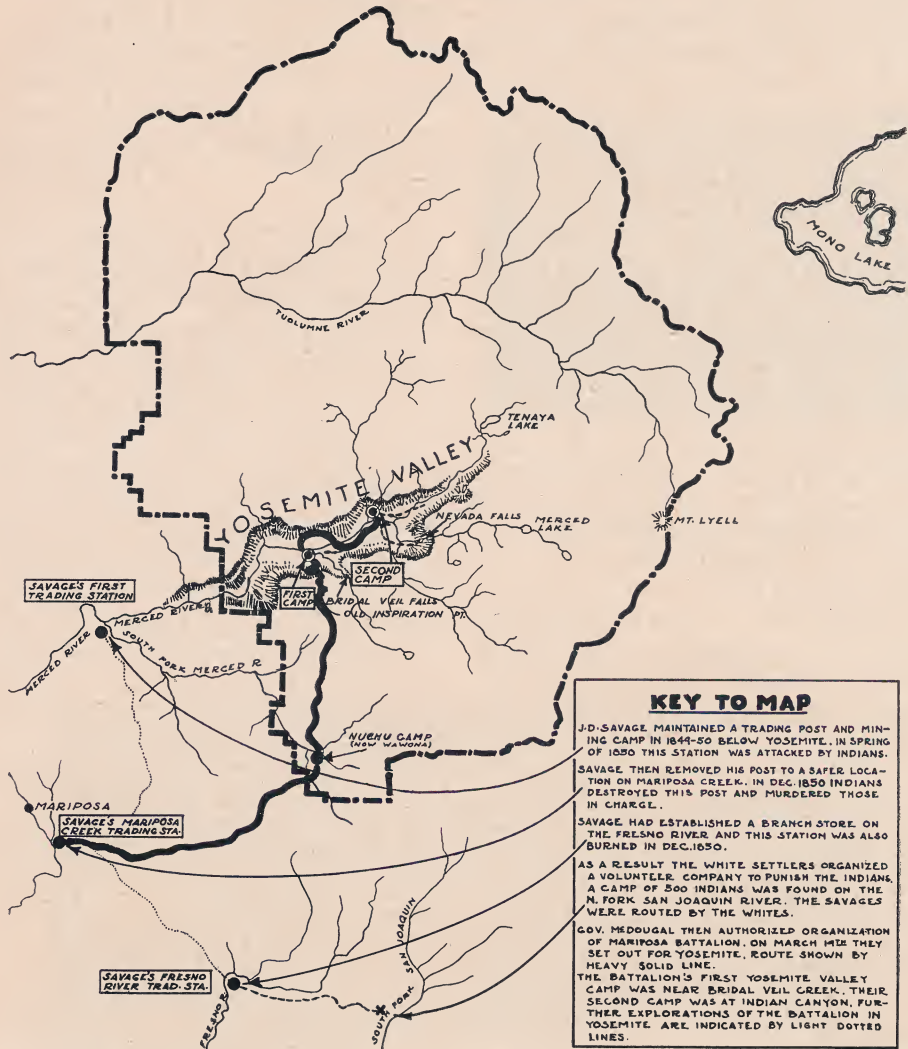
That night while Savage and his men chatted around a campfire near Bridalveil Fall, Dr. Bunnell, who was thrilled with the rare scenic value of the valley, suggested that it be called "Yosemite," after the Indians who were being driven out. Thus Yosemite Valley was entered for the first time by white men and named the same day.

The following day Savage and his men searched the valley floor in vain; they scouted up Tenaya Creek

(*) Actual discovery of Yosemite Valley occurred at an earlier date. In the fall of 1833 a party of approximately 40 men, under the leadership of Joseph Reddelford Walker, passed through the area now included in Yosemite National Park. This journey was memorable in that it represented one of the first crossings of the Sierra Nevada. Members of the Walker party were thus the first white men to enter the area now included in Yosemite National Park.

Unfamiliarity with the region, its rugged terrain, and the season's lateness combined to make their journey through this region a long and extremely arduous one. Records indicate that members of this group, in scouting for a suitable westward route through the mountains, first saw the Valley from a point on the north rim. However, the Walker party never entered the Valley and their discovery made no great impression upon them. Thus this fact was not fully substantiated until comparatively recent years. In consequence, the existence of Yosemite Valley was generally unknown in 1851 when it was first entered by the Mariposa Battalion, although certain Indians had hinted of the presence of a formidable mountain refuge on several occasions co-incidental with the Indian troubles of that period. (See "Narrative and Adventures of Zenas Leonard, edited by M. M. Quafie, Lakeside Press, Chicago, 1934; also Walker's Discovery of Yosemite, Francis P. Farquhar, Sierra Club Bulletin, Vol. XXVII, No. 4, August 1942).

ROUTE OF MARIPOSA BATTALION First Expedition—March, 1851



beyond Mirror Lake; they climbed up the Merced River canyon to above Nevada Fall, but not a trace of an Indian brave was discovered. The only living soul was an aged squaw who had been too feeble to join the others in the exodus.

Savage soothed his disappointment and failure by burning the dwellings, large caches of acorns

and other provisions the Indians had left behind.

Although they were the first to enter Yosemite Valley, and were responsible for its name, this expedition of the Mariposa Battalion did not accomplish its purpose: i.e., to exterminate the Indians. Through carelessness of the guards in charge, tricky Chief Tenaya and his entire

people were able to delay their relegation on the Fresno River Reservation by escaping during the night.



Three Brothers, named for sons of Chief Tenaya

SECOND EXPEDITION TO YOSEMITE

The second expedition against the Yosemitees took place in May, 1851, under command of Captain John Boling, whose company was a part of the Mariposa Battalion.

At the outset, five Yosemitees were captured, three of whom were Chief Tenaya's sons. Of these captives, Captain Boling released one of Tenaya's sons and his son-in-law, under promise that they would bring in the old chief so that treaty might be made; the other three were held as hostages.

The soldiers in Captain Boling's camp practiced archery with the three remaining prisoners, and one of the captives shot his arrow far beyond the others. He was allowed to search for it, but the opportunity for freedom was so overpowering that he took a chance and darted off. The other two prisoners were then tied back to back and fastened to a tree.

Later they were able to unfasten the ropes that bound them, but when attempting to slip off, the guard discovered them and fired. Tenaya's youngest son was killed; the other Indian managed to escape into Indian Canyon.

A short time after this unfortunate episode, Tenaya entered Boling's camp to surrender, and great sorrow confronted him. Before him on the ground lay the lifeless form of one very dear to his heart—his youngest and most beloved son. Captain Boling's regret did not in any way alleviate Tenaya's grief. He stood in repressed anguish, facing not only the death of his son, but the end of his liberty and happiness. A few days passed, and when Tenaya's people failed to join him in surrender, he too attempted escape, but was caught by Captain Boling just as he was about to plunge into the river. In a state of utter failure, mental anguish, and grief he piteously begged Captain Boling to kill him as he had killed his son, but warned him that his spirit would return to torment the white man.

Captain Boling continued his pursuit of the remainder of the Yosemitees into the snow-clad high country, and with his soldiers surprised them as they were encamped on the shores of Tenaya Lake. The Indians, realizing that resistance was futile, surrendered. Records state that so anxious was Captain Boling to advance upon the Indians when their camp was discovered that he did not allow his soldiers sufficient time to don their uniforms. They were given

the command to march four miles over and through ten feet of snow stripped to their red flannel underwear.

In 1928, old Maria Lebrado, the last of Tenaya's people, described this incident as seeing "lots of red."

TENAYA'S LAST DAYS

Subsequent to the success of the second Yosemite expedition Tenaya and his people were assigned to the Fresno River Indian Reservation along with many other subdued tribes. Here, Tenaya chafed miserably under restraints placed upon him, and was unable to adapt himself to his new environment. After constant appeals, the Indian Commissioners permitted him to return to Yosemite Valley under promise that he would provoke no more trou-

ble. Tenaya was soon joined in his old stamping grounds by other Indians of his tribe who managed to escape from the reservation. The winters of 1851 and 1852 passed and Tenaya kept his promise to the commissioners by causing no disturbances. In May 1852, a party of eight prospectors fearlessly entered Yosemite Valley with no idea of trouble with what they supposed were peaceable Indians. To their utter horror and astonishment the Yosemitees made an unexpected and vicious attack. Two of their number were brutally murdered and the others barely escaped with their lives.

As the Mariposa Battalion had been disbanded, a detachment of the regular army was immediately sent into the valley from Fort Miller to forestall further trouble. Five Indians



Tenaya Lake, named for Chief Tenaya, last chief of the Yosemitees.

were captured. When the soldiers found clothing belonging to the murdered men among their belongings, the captives were at once shot by Army orders. Tenaya and his remaining tribesmen managed to escape and took refuge with their allies, the Piutes, at Mono Lake.

In the late summer of 1853, old Chief Tenaya and his small group of followers returned to Yosemite Valley for the last time. Having no horses of their own for meat, they treacherously stole a number belonging to the Monos. When this theft was discovered by the owners, they at once made ready to pursue Tenaya, and to administer revenge for this gross expression of ingratitude.

While Tenaya and his band sat around a campfire enjoying a feast,

the Monos suddenly swept down upon them. One Mono Indian hurled a rock directly at Tenaya's head, which crushed his skull. For the old chief, who had escaped death so many times, there were final darkness and oblivion. The Monos killed all of Tenaya's followers, except a few women and children, one of whom was Maria Lebrado. In 1928, Dr. Carl P. Russell, at that time Yosemite's Park Naturalist, interviewed aged Maria Lebrado as the only living survivor of Tenaya's people.

FOOD

Although the Yosemite Indians had neither knowledge of cultivation nor a market place to buy provi-



Shelling acorns in advance of preparing corn meal

sions, the food supply furnished by native plants, animals, birds and insects afforded them a varied diet. For meat they killed the deer, small mammals, birds, and caught fish. In addition, there were acorns, berries, pine nuts, edible plants, bulbs, mushrooms, fungi, larvae of ants and other insects in their season. The acorns of the Black Oak, rich in nutritious vitamins, constituted the "staff of life."

Gathering the acorns, storing them in the chuck-ah granary, along with the complicated preparation of acorn mush and bread constituted a laborious and lengthy task that the Indian woman accepted as a matter of routine.

The chuck-ahs in the Museum Garden "Indian Village" constructed by Maggie (Ta-bu-ce) are typical of the granaries employed for storing the acorns. At first glance these huge, cylindrical, basket-like affairs remind one of big, clumsy nests built by some giant bird. Four slender poles of Incense Cedar about eight feet high arranged in a square, and a center log or rock two feet high for the bottom of the chuck-ah, constitute the frame support. The basket-like interior is of interwoven branches of deer brush (*Ceanothus*) tied at the ends with willow stems and fastened together with wild grapevine. This is lined with dry pine needles and wormwood. The latter supposedly discourages the invasion of insects and rodents, and grows abundantly in the museum region. After the chuck-ah has been filled with acorns gathered in the



Chuck-ah, used for acorn storage
Photo by C. A. Harwell

fall, it is topped with pine needles, wormwood, and sections of Incense Cedar bark that are bound down firmly with wild grapevines to withstand windstorms. The final touch is thatching the exterior with short boughs of White Fir or Incense Cedar, with needles pointing downward to shed snow and rain, and fastening them securely with bands of wild grapevine.

Method of Preparing Acorn Mush, Bread and Patties

After cracking and shelling the acorns, the spoiled meats were removed, and the kernels pounded into fine yellow meal. Mortar holes in granite are found at every village site. In order to remove the bitter tasting tannin from the meal, leaching was required. In this process the

acorn meal was first placed in a previously prepared shallow, hard-packed sand basin. At short intervals water was poured over the mixture, and allowed to seep through the sand. About seven applications of water were necessary to remove the tannin—the last three being increasingly warm.

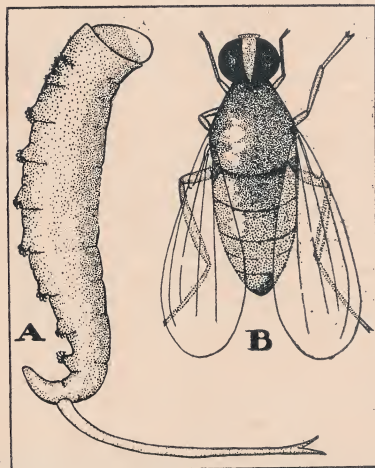
Three products were obtained from the leaching according to the fineness of the meal: the fine meal served for gruel or thin soup; the middle product for mush, and from the coarser material small patties were formed, and baked on hot, flat rocks.

The mush was cooked in a large cooking basket, using the proportion of two quarts of newly leached acorn meal to six or seven quarts of boiling water. Heat was provided for both boiling the water and cooking the mush by gently lowering hot stones into a large cooking basket by means of wooden tongs. When the mush was done, the stones were removed with the tongs and dropped into cold water, so that the mush adhering to them might congeal and when cool be peeled off and eaten.

Insects

One of the most important articles of trade between the Monos and the Yosemitees was the insect delicacy *Ka-cha'-vee*, which came from the saline waters of Mono Lake in the form of a peculiar insect pupae, breeding there in countless numbers. The waves cast on the shore great windrows, composed of millions of bodies of these undeveloped species

of fly. The squaws scooped up the pupae into large baskets, and when the smelly mass was thoroughly dry, they were rubbed to remove skins. After further drying, they were packed for winter use. The final product had a flavor similar to shrimp, but was not nearly so strong.



Ka-cha-vee, an insect food (x7)

(a) Pupa, used by the Indians

(b) The Adult Fly (*Ephydra hians*)

Another prized commercial food product which the Monos traded with the Yosemitees were the caterpillars of the Pandora moth, better known in the Indian tongue as *Pe-aggi*. These were collected in the Jeffrey Pine forests just east of Yosemite National Park. At a certain time known to the Monos, the caterpillars left the trees to enter the ground to form pupal cases, and were trapped in shallow trenches dug in loose soil around the trees. The squaws visited these trenches at intervals and collected the caterpillars that had accumulated there. They were then dried and stored

away for cooking into stew. Grasshoppers and larvae of yellow jackets were also used as food, and were roasted in an earthen oven.

Greens

Miner's Lettuce was eaten raw. Sometimes red ants were allowed to run over the leaves to flavor them with formic acid, which gave an



Miner's Lettuce

added sour taste. This was a substitute for the modern use of vinegar. Fern shoots of the Brake Fern, which commonly grows in moist, shaded regions over the valley floor and side canyon walls, were cut when in the uncurling stage, and after removing the hairs by scraping, were eaten raw or cooked. Clover was eaten raw when the plants were young and tender prior to the flowering stage. To prevent indigestion California Bay nut was munched with clover. Lupinus bi-color, as well as other species of lupines made good greens, especially when

moistened with manzanita cider.

Bulbs

Bulbs were so important a part of the diet of the Yosemite Indians that they were one of a group of tribes described as "Digger" Indians by early California settlers.

Bulbs that made good eating were: Squaw Root, the various brodiaeas, especially bulbs of the Harvest Brodiaea, and Camass. Bulbs were baked in an earthen oven in the ground. First a small pit was dug. A layer of hot stones were placed in the bottom of it, and covered with leaves. A layer of bulbs came next, then alternate layers of leaves, stones, leaves and bulbs until the pit was filled. Over the top, a layer of earth sealed the oven, and a fire was built over it. The bulbs were allowed to bake all night, or for a period of about twelve hours.

Fish and Game

Fresh meat was usually cooked by broiling on hot coals, roasted before the fire, or in the earthen oven. For winter use meat was dried in long, thin strips by either hanging it on trees or bushes to expose to the air and sunlight, or by curing on a rack about eighteen inches above a small fire. Squirrels, rabbits and fish were roasted directly on coals, or in hot ashes, either whole or drawn. In the latter case, animal, bird or fish were stuffed with hot coals to make cooking more rapid.

Mushrooms

Mushrooms were in season during April or May. Shredded and dried they were boiled and eaten with

mineral salt, or ground in a mortar and cooked as soup.

Berries

Manzanita berries, which are smooth-skinned and of an agreeable acid flavor, were eaten raw, or made into cider for drinking and mixing with other food preparations. In making cider, the berries were crushed with a rock in a basket into a coarse pulp through which a small quantity of water was allowed to seep and drip into a watertight basket beneath. As the water seeped through the pulp, it extracted some of the berry flavor.

Other common berries used as food were wild raspberries, thimble berries, wild strawberries, currants, gooseberries, squaw berries, and wild cherries.

EATING

At meal time the family gathered around the basket of acorn mush or other viands, and using the two front fingers for a spoon, all dipped into the same basket. Sometimes a single finger was twisted around and around in the mush, in the same manner that Pacific Islanders eat poi, and piloted to the mouth.

Manzanita cider, which served as an appetizer, was enjoyed by dipping into the beverage a small stick with several short feathers fastened to one end, and then sucking the drink off the feathers. A small, tightly-woven basket, known as a "dipper," was also used for drinking water or manzanita cider.

Game was torn limb from limb from the roasted animal, and divided among members of the family.

BASKETRY

Willow, squaw bush, red-bud, tule-root, red strips of bark from Creek Dogwood, maiden-hair fern, brake fern, wire bunch grass, and other native plants served the Indian woman as material for the many baskets needed to properly perform her domestic tasks. She knew the names of all the basket material plants, their locations, and the proper time for gathering them as well as any botanist.

After gathering the materials, a further knowledge of how to prepare them for weaving was necessary. They had to be peeled, trimmed to correct width, fineness and length, soaked in cold water, boiled or buried in mud, according to her knowledge of the treatment required.

In size, shape, and weave each basket was designed to serve a special purpose. A large conical shaped basket was required for carrying heavy burdens, such as acorns, and was known as the burden basket. Such baskets were supported on the back from a strap passing over the wearer's forehead. There was a large, deep family mushbowl basket around which the family gathered to dip in the acorn mush; a small, closely-woven basket for use in serving food; a tightly woven disc-shaped basket for winnowing wild oats and other seed plants; a seed beater for use in beat-

ing seeds into a carrying basket; a dipper basket, which was small and tightly woven for drinking water or manzanita cider; a cradle or open-work basketry — sometimes covered with deer skin for carrying the papoose; special baskets for use in wedding and dance ceremonies, and basket weirs for catching fish.

The twining and coiling methods were used chiefly by Yosemite Indian women in weaving baskets. In the twined basket, the heavy foundation is vertical from the center to the rim, and the woof is of lighter material. In the coiled basket, the heavy foundation is laid in horizontal coils around the basket with the filling running spirally around heavy twigs. Throughout the whole Miwok tribes, practically the only twined baskets made were the burden basket, the triangular scoop-shaped

basket for winnowing, the elliptical seed beater, and the baby carrier (hickey). An application of soaproot, which hardens in a thin, brittle sheet, was used to make the burden baskets seed-tight. A scrubbing brush for cleaning the cooking basket was also made of fibers from the dry, outer layers of the soaproot. In weaving the coiled basket, an awl, made chiefly from the bone of a deer, was employed.

Roots of the brake fern were boiled in order to obtain the black material used in designs; red-bud was employed for the red color.

Considering that the Indian woman worked entirely without written rules, the design, color, and the mathematical accuracy of her baskets in entirety represent a work of art. Before commencing a basket she had to know exactly where to



Ta-bu-ce (Maggie Howard) and baskets. Boysen photo



Ta-bu-ce (Maggie Howard) gathering acorns during Autumn

place the first stitch of each figure of the design, and as the bowl of the basket continued to flare, the size of each figure had to be correspondingly increased.

WEAPONS

The bow and arrow was the principal weapon for both hunting and warfare. The weapon in the hand of a good marksman was dangerous at two hundred yards and fatal at fifty yards.

In constructing his bow and arrow, the Indian brave displayed as great skill as did the Indian woman in the weaving of her baskets. Incense Cedar and California Nutmeg furnished the wood for the bow. If the former was used, it was necessary to treat it several days with deer marrow to prevent brittleness when dry. The bow was three or four feet long, sinew backed, and had recurved ends.

Glue used for applying the sinew to the back of the bow was made by boiling deer and horse bones and combining the product with pitch.

Arrows for large game were in two parts. The detachable foreshaft remained in the wound—preventing it from closing and thus hastening the animal's death from loss of blood. Arrow shafts were made of syringa or wild rose bush by removing the bark, stripping and trimming the pieces to an even thickness, and then straightening them with stone tools. Finally, the shafts were polished with scouring rush. Feathers and obsidian arrows were then attached to the shaft, each feather being split down the middle, and four half feathers attached to each shaft with wrapping. Obsidian arrow heads were fitted into a slot in the end of the shaft, and held in place by sinew wrapping and pitch.



Arrow points were fashioned from obsidian (volcanic glass) by first striking large piece with hammerstone (left) to obtain section of suitable size. This was then shaped with a tool made from a deer antler (right).



Arrow point was attached to shaft by use of sinew

The plain bow without sinew backing sufficed for hunting small game at relatively close range. The best bow strings were made of twisted sinew.

Obsidian (volcanic glass) for the arrow heads was obtained from quarries in the Mono or Owens Valley region. It was a valuable trade article of the Mono Piutes, who periodically visited the Yosemite Valley. The Yosemiteites themselves occasionally made journeys across the Sierra for obsidian. Pieces of obsidian suitable for working into tools were picked up or broken from large masses of obsidian with crude stone hammers. These pieces were then carried over the mountains to Yosemite in deer skin sacks.

Small pieces suitable for working into arrow points were broken from a large rock of obsidian by striking it sharply and adroitly with a hammerstone. The obsidian block was held in the left hand, and the hammerstone in the right hand.

The small pieces were roughly

shaped with an antler tool and finished with a small antler implement. With the obsidian grasped in the palm of the left hand, which was protected by a buckskin pad, pressure was exerted on it with the sharp end of the antler tool.

FISHING AND HUNTING

Deer were stalked by hunters disguised in deer skins. By mimicking the actions of the deer, a hunter could approach near enough to make a successful shot. When many deer were desired, they were driven past ambushed Indians, or into traps or nets.



Fish spear

Fish were speared with a wooden shaft fitted with a bone point. One end of a small cord was attached to the point and the other held in the fisherman's hand. The struggles of the impaled fish freed the point from the shaft, and the fish was landed by pulling the cord.

Fish were also caught with weir traps made of long willow sprouts woven together and closed at the pointed lower end. These were ingeniously placed in an especially

constructed dam, and elevated above the surface of the water below the dam, so that in going down stream the fish ran into this trap and found themselves at the lower end of it, and out of the water.

When the water was low in summer, the Indians stupified the fish with pulverized soap-root, mixed with soil and water. This was rubbed on rocks out in the stream which roiled the water, and made it foamy. The effect on the fish was a form of strangulation, which caused them to rise to the surface where they could be easily captured by the Indians in their scoop baskets.

BONE AND ANTLER IMPLEMENTS

Bones and antlers were used by the Indians in making various tools and implements. From certain bones

of the deer, the awl was made for weaving of coiled basketry; limb bones of the Jackrabbit and Sierra Grouse served for fashioning whistles for the ceremonial dances; points of antler were used for the shaping of flint and obsidian points and blades; an antler implement was used for extracting acorns stored by woodpeckers; split deer leg bone afforded scrapers for use in working down a bow, or in removing hair from deer hide, etc.

CLOTHING

Skin from wild animals furnished the only available means of clothing. In summer the Indian man wore nothing but a loin cloth of buckskin; the Indian woman a buckskin skirt, reaching from waist to knees. Children went unclothed in warm weather until about ten years old.



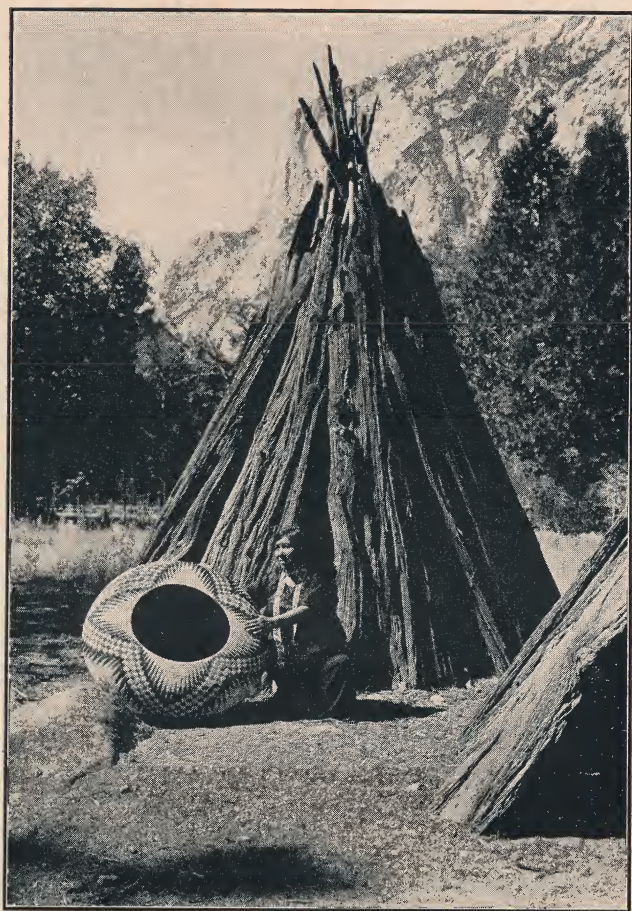
Typical summer clothing (photo from models in Yosemite Museum)

Blankets made from dressed skins of deer, bear, mountain lion, coyote, and other skins were wrapped about the body in cold weather by both sexes. The most popular blanket was made by weaving narrow strips of rabbit skins into a loose, but very warm covering, using plain cord as the woof. The same blankets worn as clothing were used as bedclothes.

The moccasin, of course, was the only style of footwear, and this was only worn in cold weather, or for

rough-country trips. Made of buckskin, it was fashioned in one piece, and lined with shredded cedar bark. It was seamed up the heel and the front, using milkweed fiber thread. Over-lapping pieces were bound around the ankles.

At the mourning and dance ceremonials, the Indian man wore a head-dress made of magpie feathers and bound with sinews; with this was worn a head-band made of tail feathers from the red-shafted flicker.



Typical dwelling or u-ma-cha. Mrs. Lucy Telles with large storage basket in foreground

Straps of eagle down draped obliquely over one shoulder and the chest, and tied around the waist, along with a wild-cat skin kilt, completed the costume.

HAIR

Adults wore the hair long, often to the waist, either flowing loosely, or caught at the back of the neck with a feather rope or boa. Hair was only cut as a symbol of mourning and this was accomplished by whacking it off with an obsidian knife. In the care of the hair, the soaproot was used for a shampoo, and was supposed to promote luxuriant growth. The fibers of this same plant sufficed for a hair brush. In the absence of the modern barber and safety razor, the Indian man permitted his heavy beard to grow to a fair size, or plucked it. Flowers and feathers were worn in the hair as ornaments.

SHELTER

The typical Yosemite dwelling was the conical u-ma-cha. This was constructed by placing a few poles ten or twelve feet long in the ground around an area twelve feet in diameter with the tops of the poles inclined together. Over this framework slabs of Incense Cedar bark were piled. The u-ma-cha was easily built, fairly waterproof, and readily kept warm. The entrance on the south could be easily closed with a portable door. There was also an opening at the top to allow smoke to escape from a fire kindled in the middle of the dwelling. A single one of these could house a family of six,

with all their worldly possessions, including the dog.

In the summer season the Indians lived outside in brush arbors, and the u-ma-cha was then used as a storehouse. Other Yosemite structures were large, earth-covered round houses for ceremonies, and some small, earth-covered sweat houses for cleanliness and curative uses.

CEREMONIES AND CUSTOMS

The more than thirty individual villages and camp sites on the floor of Yosemite Valley were sharply divided into two classes in respect to the river, in accordance with the Miwok principle of totematic division; i.e., the Indians classified everything in nature as belonging to either the land or to the water side. The Grizzly Bear was the head of the land side; the Coyote the head of the water side. This division included not only the Indians themselves, but all other objects including even the stars. It was the custom of the man to always marry into the opposite division. In this manner in-breeding was kept to a minimum. Thus members of the Grizzly Bear moiety were assigned to the north side of the Merced River, and members of the Coyote moiety to the south side.

As stated previously, it is believed by some authorities that the name "Yosemite" which means "full-grown Grizzly Bear," later came to be applied by outsiders to all of Tenaya's people rather than to only the Grizzly Bear moiety on the north side of the river.

MEDICINE MEN

When an Indian fell ill, a shaman or medicine man was called to treat him. This Indian doctor, who was believed to have the powers of a clairvoyant, would dance, sing, and manipulate the patient. He then proceeded to suck the part of the body afflicted with pain, as a means of removing some religious taboo, or to dislodge a foreign object that had been placed there by a witch or wizard. Upon completion of this treatment, he would show the patient and relatives concerned a few hairs, a dead insect, or other foreign object to prove that he had been successful in removing the trouble. The psychological effect upon the patient when shown that the cause of his agony had been removed was most effective, and the relatives were satisfied that in a few days the patient would be well.

The Indians had great faith in the medicine man, but if he was unlucky enough to lose several patients, it behooved him to be concerned about his own life. The relatives of the deceased patients laid ever in wait for him in ambush, and unless he was able to escape to another locality, he was eventually murdered.

DEATH AND MOURNING

Cremation among the Indians was a common practice to liberate the spirit of the dead. To burn all of the belongings of the deceased at the cremation, excepting a few that were reserved for the annual mourning anniversary, was the usual proced-

ure. All the mourners while dancing or crying around the cremation fire, threw some gift into the flames as an offering of respect. When the body was consumed, the remains were gathered up and buried.

A widow cut her hair short with an obsidian knife, or burned it off. As a further symbol of grief, she smeared her face over with a weird ointment made of pitch and some of the ashes of her departed husband. Other near female relatives were also expected to so anoint themselves. This hideous mixture would sometimes cling to the face and clothing for six months, or even throughout the whole year of mourning, since it was disrespectful to wash it off.

In the late summer or autumn of each year, the Indians remembered their dead with a mourning ceremony. For several nights there were weeping, wailing, and singing around a campfire. At dawn on the last day of the ceremony, the mourners threw food into the fire for the spirits of their dead. Those who had lost loved ones during the year, fed the fire with the remainder of the deceased's belongings, which had been saved from the cremation ceremony. As a symbol that the period of grief and its restrictions were over, the mourners cleansed themselves with water.

CEREMONY OF THANKSGIVING

The Indians also celebrated their own Thanksgiving—an acorn celebration as a symbol of gratitude to the "Coyote Man," an important diety of Miwok Indian mythology.



Lee-mee (Chris Brown) wearing ceremonial dance costume

For three days and three nights the dancers performed the acorn dance and fasted. On the fourth day selected squaws prepared the acorn mush and other food for a feast. When the food was ready, all those expecting to participate in the feast joined in a dance, moving slowly around the fire in a large circle, chanting and shaking their rattles vigorously over the flames. To terminate the dance, one of the squaws spread acorn gruel in four successive circles around the edge of the fire so that it might burn and be carried into the air in four directions to be eaten by the spirits of the dead. No one dared eat of the new acorn crop until the spirits had thus been satisfied. After the feast, dancing continued far into the night—a fire dance

as a tribute to the fire that heated the cooking stones; a stone dance in appreciation of the stones that when heated cooked the acorn mush, and a basket dance to the basket which held the mush.

YOSEMITE INDIANS TODAY

So far as is known, there are no full-blood Yosemites alive today. The Indians living in Yosemite are of mixed blood through inter-marriage with other tribes and races, mainly white and Mexican. Their mode of living is very similar to that of the whites in that they drive their own automobiles, have washing machines, radios, sewing machines, and most of the modern comforts and conveniences of civilized life.



Indian acorn-food exhibit, Yosemite Museum

INDIAN LEGENDS

Living close to nature as did the Indians, in constant close relationship with animals, plants, and other natural features, it is easy to understand how their religion, their superstitions, and their legends should center around the great cliffs and spires, the waterfalls, animals, and even the winds which they knew in their daily existence. As is characteristic of primitive peoples without a written alphabet, the legends of the Yosemite Indians were handed down by word of mouth, from generation to generation. It is reasonable to assume that elaborations developed with the passing of time. The three legends which follow tell of the origin of several of the most beautiful features of Yosemite Valley—El Capitan, the massive cliff at the lower end of the valley; the Lost Arrow, a spectacular shaft of rock jutting out from the cliff just to the east of Yosemite Falls; and Half Dome, Royal Arches, Washington Column, and Basket Dome at the upper end of the valley.



LEGEND OF EL CAPITAN

Long, long ago there lived in the Valley of Ah-wahnee two cub bears. One hot day they slipped away from their mother and went down to the river for a swim. When they came out of the water, they were so tired that they lay down to rest on an immense, flat boulder, and fell fast asleep. While they slumbered, the huge rock began to slowly rise until at length it towered into the blue sky far above the tree-tops, and wooly, white clouds fell over the sleeping cubs like fleecy coverlets.

In vain did the distracted mother bear search for her two cubs, and although she questioned every animal in the valley, not one could give her a clue as to what had happened to them. At last To-tah-kan, the sharp-eyed crane, discovered them still asleep on top of the great rock. Then the mother bear became more anxious than ever lest her cubs should awaken, and feel so frightened upon finding themselves up

near the blue sky that they would jump off and be killed.

All the other animals in the valley felt very sorry for the mother bear and promised to help rescue the cubs. Gathering together, each at-



El Capitan

tempted to climb the great rock, but it was as slippery as glass, and their feet would not hold. Little field mouse climbed two feet, and became frightened; the rat fell backward and lost hold after three feet; the fox went a bit higher, but it was no use. The larger animals could not do much better, although they tried so hard that to this day one can see the dark scratches of their feet at the base of the rock.

When all had given up, along came the tiny measuring worm.

"I believe I can climb up to the top and bring down the cubs," it courageously announced.

Of course, the other animals all sneered and made sport of this boast from one of the most insignificant of their number, but the measuring worm paid no attention to their insults and immediately began the perilous ascent. "Too-tack, too-tack, To-to-kon-oo-lah," it chanted, and surely enough its feet clung even to that polished surface. Higher and higher it went, until the animals below began to realize that the measuring worm was not so stupid after all. Midway the great rock flared, and the measuring worm clung at a dizzy height only by its front feet.

Continuing to chant its song, the frightened measuring worm managed to twist its body and to take a zig-zag course, which made the climb a great deal longer, but much safer. Weak and exhausted it at last reached the top of the great rock, and in some miraculous manner awakened the cubs and guided them safely down to their grief-

stricken mother. Of course, the whole animal kingdom was delighted and overjoyed with the return of the cubs and the praises of the measuring worm were loudly sung by all. As a token of honor the animals decided to name the great rock "To-to-kon-lah" in honor of the measuring worm.

LEGEND OF THE LOST ARROW

Tee-hee-neh, a beautiful Indian maid, was betrothed to Kos-soo-kah, a young brave, who was fearless and bold with his spear and bow. At dawn on the day before their marriage, Kos-soo-kah made ready with other strong braves to go forth into the mountains to hunt bear, deer, rabbit and grouse for the wedding feast. Before leaving, he slipped away from the other hunters to meet Tee-hee-neh, his bride, who was waiting nearby.

As they parted Kos-soo-kah said, "We go to hunt now, but at the end of the day, I will shoot an arrow from the cliff between Cho-look, the high fall, and Le-hamite, the Canyon of the Arrow-wood, and by the number of feathers you will know what kill has been made."

Tee-hee-neh happily assisted the Indian women in preparing acorn bread and other food for the marriage celebration until the appointed time when she was to wait at the foot of the high fall for the arrow message from Kos-soo-kah. Hour after hour she waited until gradually the joy she had known was replaced



Lost Arrow

with fear and concern for her lover's safety. At last, unable to bear her anguish longer, she decided to climb the rugged and difficult trail that led to the top of the cliff.

"Kos-soo-kah," she called again and again, but the only answer was the faint echoing of her own voice. Breathless, frightened, and her heart heavy with a dreaded fear that Kos-soo-kah had met with harm, she at last reached the summit. Seeing footprints in the direction of the cliff, she moved toward the edge in bewildered alarm, not for her own safety, but for what she might behold. As she leaned over and looked down, she gave a piercing cry of despair, for in the starlight she beheld the still form of her loved one

lying on a ledge below with the spent bow in his hand. She now remembered that at the hour of sunset while she stood waiting for Kos-soo-kah's arrow to fall she had heard the distant, thunder-like rumble of a rock slide. Her despair was almost overwhelming as she realized that while her faithful Kos-soo-kah stood on the edge of the cliff to draw his bow, he had been caught in the unexpected slide of earth that had hurled him to his doom.

A faint hope stirred in Tee-hee-neh's heart. Perhaps Kos-soo-kah was still alive. To summon assistance as quickly as possible, she frantically collected cones and dead limbs to light a signal fire for urgent help. Although numbed with grief, she kept the fire bright and high for several hours before men from the valley and other braves who were returning from the hunt in the high country were able to reach her. Quickly, the braves made a pole from lengths of tamarack and fastened them securely with thongs of hide from the deer that had been killed for the marriage feast. Although exhausted, Tee-hee-neh was the first to descend to the ledge where Kos-soo-kah lay. As she knelt beside him and listened for breath, her own heartbeat almost stopped, for the brave Kos-soo-kah was cold and still. Without a murmur, she motioned for the men above to lift her.

Tee-hee-neh's wedding day had dawned when the braves were at last successful in raising the body of Kos-soo-kah to the top of the cliff where the others waited. As his life-

less form was placed gently on the ground, Tee-hee-neh knelt beside him, and with tears streaming down her cheeks she repeated his name over and over, as though by doing so she could call him back to her. Suddenly she fell forward on her dear one's breast, and her spirit too departed to join that of Kos-soo-kah in the land that knows no partings.

With great wailing and mourning the two lovers and all their belongings were placed for cremation on the funeral pyre in accordance with the burial custom. In Kos-soo-kah's hand was the fatal bow, but the arrow had been lost forever. In its stead the spirits lodged a pointed column of rock in the cliff between Cho-look, the high fall, and Le-ham-ite, the canyon of Arrow-wood in memory of the faithful Kos-soo-kah who met his death in keeping a promise to Tee-hee-neh. Ever since this rock has been known as Hum-moo, the Lost Arrow.

LEGEND OF HALF DOME

Many, many generations ago, long before the Gods had completed the fashioning of the magnificent cliffs in the Valley of Ahwahnee, there dwelt far off in arid plains an Indian woman by the name of Tis-sa-ack and her husband Nangas. Learning from other Indians of the beautiful and fertile Valley of Ahwahnee, they decided to go there and make it their dwelling place. Their journey led them over rugged terrain, steep canyons and through

dense forests. Tis-sa-ack carried on her back a heavy burden basket containing acorns and other articles, as well as a papoose carrier, or hickey. Nangas followed at a short distance carrying his bow, arrow and a rude staff.

After days and days of weary traveling, they at last entered the beautiful Valley of Ahwahnee. Nangas being tired, hungry and very thirsty, lost his temper, and without good reason he struck Tis-sa-ack a sharp blow across the shoulders with his staff. Since it was contrary to custom for an Indian to mistreat his wife, Tis-sa-ack became terrified and ran eastward from her husband.

As she went, the Gods looking down, caused the path she took to become the course of a stream, and the acorns that dropped from her burden basket to spring up into stalwart oaks. At length Tis-sa-ack reached Mirror Lake, and so great was her thirst that she drank every drop of the cool, quiet water.

When Nangas caught up with Tis-sa-ack, and saw that there was no water left to quench his thirst, his anger knew no bounds, and again he struck her with his staff. Tis-sa-ack again ran from him, but he pursued her and continued to beat her.

Looking down on them, the Gods were sorely displeased.

"Tis-sa-ack and Nangas have broken the spell of peace," they said. "Let us transform them into cliffs of granite that face each other, so that they will be forever parted."

Tis-sa-ack as she fled tossed aside the heavy burden basket to enable her to run faster, and landing upside down it immediately became Basket Dome; next she threw the papoose carrier, or hickey, to the north wall of the canyon, and it became

Royal Arches. Nangas was then changed into Washington Column, and Tis-sa-ack into Half Dome. The dark streaks that still mar the face of this stupendous cliff represent the tears that Tis-sa-ack shed as she ran from her angry husband.



Half Dome from Glacier Point

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